Mobility as a Service in Nowadays Transportation Schemes: An Approach to Go-Jek`s Operational Challenges on its Indonesian Operation.

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ABSTRACT

The Case Study aims to get a viable solution on real corporate challenges that Asian companies face in the development of their commercial activities. For this scenario, the company to be taken into consideration will be "Go-Jek", an Indonesian company based in Jakarta, which focuses its primary activity in ride-hailing (carpooling) using motorbike taxis, it offers 18 app-based on-demand services; Go-Jek, nevertheless, encounters challenges regarding its regulation and acceptance by independent motorbike companies. Based on the previous statement and due to the lack of laws regulating the business, Go-Jek has an uncertain future of developing its commercial activities to a broader market share. Correspondingly, the case study will be focused on proposing a viable solution for reducing frictions and possible accidents between the company and conventional taxis or any private transportation system already implemented.

Keywords: Ride-hailing, Startup, application, motorbikes, Indonesia.

INTRODUCTION

Indonesia has a lot of motorcycles, both for personal use and as a public service. This way of transportation is commonly used by natives and foreigners, "the quickest and easiest way to get through the city's traffic is in the back of a motorcycle taxi" (Wall Street Journal, 2015). Because of its constant use, new applications have been created to offer an easy and fast service, for example Ladyojek or *Go-Jek.* These applications have been created in recent years and have gained immense popularity in Indonesia and neighboring countries, mostly due to the functionality and the fast and quality job delivered by the companies providing the service.

Additionally, *Go-Jek* is a technology startup that offers a carpooling service similar to what we know as Uber but in the very common motorbikes you can find in Indonesia. In fact, It now has more than 1 million drivers and offers 18 different services on its app and it is starting to expand to countries like Vietnam, Thailand, Singapore and the Philippines. However, *Go-Jek* hasn't been free of controversies; with its rapid growth and expansion in the industry, many conventional motorbike taxis have protested against its service. In 2015, when the app was fairly new, all ride-hailing apps had been banned by the Transport Ministry under the argument that the app does not fulfill the legal requirements to be a public service provider (The Jakarta Post, 2015). Indonesians protested the ban resulting in it been lifted that same day.

Furthermore, even though regulations since then have been changed allowing privately owned cars to use in public transport by joining a cooperative (C. Johnson, 2016), Go-Jek and other ride-hailing applications still face the animosity of conventional and motorbike taxi companies, which affects the comfort of the clients, the safety of the drivers and the general peace of the country.

OBJECTIVES

The current case study aims to provide a realistic and achievable solution to the challenges that *Go-Jek*, a Mobility-as-a-Service startup company based in Jakarta, Indonesia, faces in the development of its commercial activities, mainly due to the collision with local and already established transportation organizations.

This will be done mainly by analyzing different cases of companies that offer a similar service around the globe, the final goal of the project is to enhance *Go-Jek´s* business plan by reducing the number of incidents occurring by the development of its primary activity in Indonesia and on the countries to which it has expanded to. All of the previous, at the light of a proper communication with the company in order to understand properly their biggest challenges and the way they have endured to solve them.

THEORETICAL FRAMEWORK

As stated before, *Go-Jek* is a company founded in Indonesia. Starting in 2010 as a two-wheeled transportation company using phone applications. Even though it started as only offering a service like a motorbike taxi it now offers a full range of services ranging from logistics, payment, food delivery and more.

Based on its web page, *Go-Jek's* mission is to be a technological start-up with a social mission, improving the welfare of drivers and consequently of their families. It offers access to health and accident cover, financial services and insurance. Furthermore, it allows drivers and users to benefit from a safer, faster and in general easier service. GO-JEK now operates in 50 cities across Indonesia, including Bali, Balikpapan, Banda Aceh, Bandar Lampung, Bandung, Banjarmasin, Banyuwangi, Batam, Belitung, Bukittinggi, Cilacap, Cirebon, Garut, Gresik,Jakarta, Jambi, Jember, Karawang, Kediri, Madiun, Madura, Magelang, Makassar, Malang, Manado, Mataram, Medan, Mojokerto, Padang, Palembang, Pasuruan, Pekalongan, Pekanbaru, Pematang Siantar, Pontianak, Probolinggo, Purwakarta, Purwokerto, Salatiga, Samarinda, Semarang, Serang, Sidoarjo, Solo, Sukabumi,Sumedang, Surabaya, Tasikmalaya, Tegal, and Yogyakarta, with more cities to follow in the coming years.

Go-Jek has many services offered. The services provided by GO-JEK include: GO-Ride, GO-Car, GO-Send, GO-Points, GO-Pulses, GO-Shop, GO-Bluebird, GO-Deals, GO-Bills, GO-Mart, GO-Box, GO-Clean, GO-Glam, GO-Tix, GO-Auto, GO-Med, GO-Nearby, and GO-Daily.

1. GO-Ride: is a service that takes people to use motorbikes.

2. GO-Car: is a service that takes people to use cars.

3. GO-Food: is a service that delivers food to homes, workplaces and more.

4. GO-Send: is a service that delivers goods in small quantities at a short distance and usually within the same city.
5. GO-Points: is a loyalty program from Go-JEK specifically for Go-Pay users.

6. GO-Pulsa: is a service for purchasing credit (credit is used as payment for telephone charges).
7. GO-Shop: is a service for shopping in stores.

8. GO-Bluebird: is a service that takes people by taxi.

9. GO-Deals: is a service for exchanging food vouchers, hotels, travels, and more.

10. GO-Bills: is a payment service for electricity, water, and more.

11. GO-Mart: is a service for shopping on the market.

12. GO-Box: is a service that delivers goods in large quantities using a box car.

13. GO-Massage: is a service for massage.

14. GO-Clean: is a service for cleaning houses.

15. GO-Glam: is a service for beauty care.

16. GO-Tix: is a service for buying cinema tickets.

17. GO-Auto: is a machine repair service that has a problem or damaged vehicle.

18. GO-Med: is a service to deliver Medicines.

19. GO-Nearby: is a service to notify consumers about the nearest place to eat in their neighborhood.
20. GO-Daily: is a service to deliver large-sized bottled mineral water and LPG gas.

The service is very helpful for consumers of motorcycle taxi, because it is not only an application for service providers to use as transportation for people but also a variety of services that are also needed by the people of Indonesia. So, GO-JEK consumers do not need to leave the house just to buy food, they can use the GO-JEK application to buy food and just wait at home until the motorcycle taxi drivers deliver the ordered food. The convenience and short time in providing services for consumers in Indonesia is the reason why there are so many users of this application.

Financial system of Motorcycle Taxi Drivers in Go-Jek

GO-JEK drivers get income from money paid by consumers, whether in the form of cash or through Go-Pay. If consumers pay using Go-Pay, then the money paid will go into the bank account of the motorcycle taxi driver, if the driver of the motorcycle requires money he can take the money at the nearest ATM. GO-JEK drivers will also get a bonus from the motorcycle taxi company if they can meet the targets given by the company, for example, by delivering 15 passengers in 1 day they will get an additional bonus that will go directly into their bank account. The bonus offered by the company is very tempting, so many GO-JEK drivers are competing to be able to meet or even exceed the target, which makes the service delivered by drivers and the company itself extremely customer-service-based.

Research Methodology

Accordingly, to the structuring of the case study, by means of theoretical interpretation and the overview of new technologies for the proper developing and evolution of transportation and Mobility as a Service in the cities of today, the methodology applied in researching a viable solution to Go-Jek`s business model was focused on the analysis of previous cases. Cases where the conditions of the business involved and the environment surrounding it are similar in several ways to the Go-Jek case.

In other words, through the analysis of past experiences, and emphasizing on the conditions of both systems being compared, it is possible to determine whether or not a solution applied before could be feasible for implementation in a new a-like situation. For this matter, cases as *Whim* and *Uber*, serve as good opportunities to understand the dynamics of MaaS on the international market and how the several challenges around its business model could be solved. Even more, taking into consideration the fact that both cases (Uber and Whim) were examined at the light of two completely opposite backgrounds, one being in Mexico, Latin America and the other one being in the scandinavian peninsula; two completely different environments, but that could help assimilate to an Indonesian market somehow.

Mobility as a Service (MaaS)

Mobility as a Service is relatively a new concept and at this stage, it would be premature to give it a specific definition. However, it is strictly based on improving the overall experience of moving across distances with a high level of satisfaction taking into consideration the time and money spent, as well as the customer experience and comfort. Nevertheless, MaaS business models and overall structural adaptation to big transportation services is still in its early stages.

On the other side, it is important to notice the big impact that MaaS has within a city and its mobility throughout business rush hours and even at night time in comparison with standard public transportation services as buses, metro and even at certain levels, Taxi companies. Even more, these facts are, indeed, the core reasons why most MaaS companies, app based companies and virtual business in the field are having trouble with delivering their product to the general public; the probable loss of market share from already-standing transportation business operators in most cities is a struggle that is mostly faced with violence and sometimes dishonest techniques to prevent companies such as *Go-jek* from delivering their services to their customers.

In contrast, for years, a traveler required different tickets for the various kinds of transportation modus and operators. In that way, public transportation within cities and other urban or regional areas was often seen as inconvenient and sometimes expensive. Nevertheless, nowadays transport service has entered a new and standardized era with the modernization and digitalization of the Industry making that new ideas and online based platforms or applications enter the market offering an alternative to transportation in urban centers. Indeed, the aim of this new platforms is mainly to provide consumers with a better alternative to arrive at the different places they concur in less with better time conditions, more efficiency and more regulated to offer even more security to the users of the service.

On the other hand, it has the Rocky Mountain Institute has forecasted that after 2020 the car ownership will start to drop as public transportation continues to become a better alternative to mobilization in a city due to the high standardization that it is getting nowadays and that will continue to grow in the future. (Li, Y., & Voege, T. 2017) Even more, this trend to decrease the automobile sector around the globe comes with big car companies such as BMW and Daimler starting to seek market share in car sharing services such as Car2 Go from Daimler and Drive Now by BMW. All these changes within the industry are making new generations of business models to emerge in the form of Car-Pooling and private transport applications such as Uber, Cabify and more. As a result, big changes have come to reality when public transport companies and public transport authorities rely on the new systems that are being created by these new platforms in order to reduce their operational costs on infrastructure and operation systems.

If all conditions above have been met in a city, implementation of MaaS still faces significant challenges on users' perspectives, business model and policy support, even though *MaaS* has been seen by transport professionals as potentially enabling a paradigm shift towards more sustainable urban mobility. There is no doubt that *MaaS* does have great potentials to offer convenient and comfortable travels in a city without owning a car. *MaaS* can help a user to plan their journeys based on the user's calendar, thus providing the user with stress-free travel planning. Implementation of *MaaS* at a local level can make even more people use the service of private transportation itself. (Li, Y., & Voege, T. 2017)

Additionally, the monthly or yearly ticket for certain public transport types is highly used in some developed cities. These tickets include metro, buses and sometimes even taxis (e,g Shanghai). However, the implementation of such services to cover a broader and multiservice system is still limited to a few cities and urban centers. *MaaS* brings, in a lot of cases, annual subscription to platforms in which the user can openly get a ticket to conveniently use in several transportation types; that is the huge advantages of the mobility as a service when different services and applications enter the market. For example, *Vélib*, a French large-scale bicycle sharing company has monthly subscription that allows users to use a bicycle free for half an hour within the city and gives a high degree of mobility and interaction thought their online and app-based platform. (Li, Y., & Voege, T. 2017)

Even more, another good example is *Whim,* a fast-growing company based in Helsinki, Finland; *Whim* offers a variety of plans that allows the user to have an alternative for owning a car, as the company provides public and private transportation possibilities depending on the plan chosen by the customer, with the possibility of having a monthly subscription to their service; as seen in *Figure 1.*
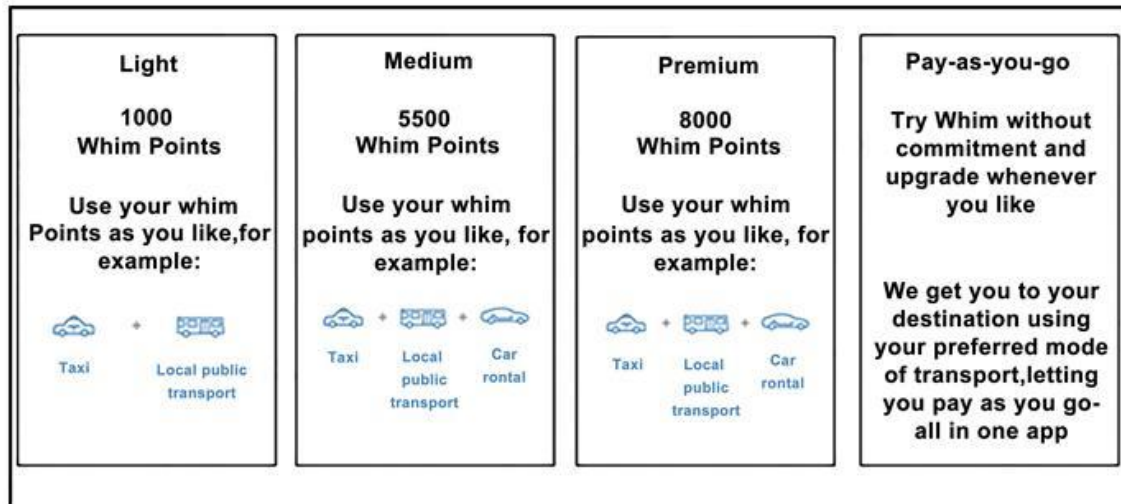

Figure 1. The different monthly plans used by *Whim. (Li, Y., & Voege, T. 2017)*

Challenges for MaaS System

Even if the future of MaaS has a brighter side than a scenario where every person in the globe owns a car and uses it to move around the city, there is way more than that in order to affirm a round business model for MaaS companies and applications. Indeed, there is still the paradigm over having an own car and using it at will and without strings to move around the city or even in the country at best, however, the trend over using a different and alternative transportation way is there and growing by every day. As stated by Li, Y., & Voege in their article *Mobility as a Service (MaaS): Challenges of Implementation and Policy Required,* Researchers in Gothenburg have concluded that 93% of participants were satisfied with their travel and 97% wanted to continue using UbiGo (Swedish company based on a MaaS business model); indicating a high acceptance rate over the use of such mobility means.

On the other side, the decrease private owned cars could force the general public into a different lifestyle and way of realizing everyday tasks, also, there are certain requirements to understand if a MaaS option is possible in a city and its mainly related to the existing systems that are currently working in the mobility net of any urban center. As it is pictured in *Figure 2,* a properly developed public transport system with certain characteristics is necessary in order to understand the feasibility of MaaS implementation. Even more, in such case that none of the conditions necessary to implement such system is available, implementing MaaS would turn nearly impossible.
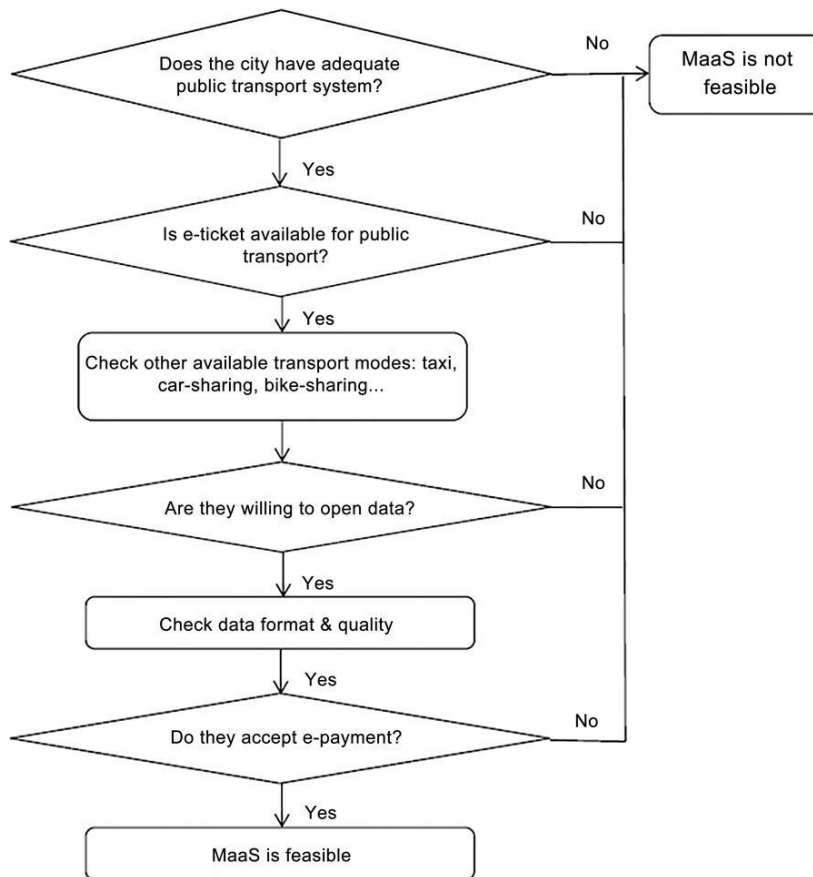
Figure 2. Operating MaaS in a city. *(Li, Y., & Voege, T. 2017).*

Additionally, in order to understand the *Go-Jek* case, it is imperative to foresee the main issue with their core business regarding the abuses and somehow discrimination techniques used by rivalry companies and parties in order to affect or even shut down its commercial activity.

The Biggest Challenge for Go-Jek

The biggest challenge for motorcycle taxi companies is that there are still many controversies between motorcycle taxi drivers and public transportation and conventional motorcycle taxi drivers. There are still frequent clashes and riots that are usually only triggered by trivial things. Lots of motorcycle taxi drivers have thoughts about the existence of an educational activity for drivers of public transport and conventional motorcycle taxis to unite drivers of public transport so that there is no more chaos or controversy that often occurs.

That, meaning that the most difficult aspect of Go-Jek`s main commercial activity it's the controversies over their service and the bad relations that the company shares with rival companies and informal Motorcycle Taxi Drivers. First, it is necessary to understand the Indonesia is a country where the traffic, population and road infrastructure demands for an alternative way of mobility around the Indonesian cities (Winters, J. A. 1996).

There are certain areas where is only possible to access by Motorcycle and even more, the time that takes for a motorcycle to get through traffic is surprisingly reduced than if used a car or other form transportation.

For this matter, the amount of Motorcycle Taxi Drivers has increased exponentially over the last 10 years alone, most of which, are informal workers trying to make a living out of their highly demanding day to day job. Likewise, App Based companies such as *Go-Jek* provide a service that is higher in quality and is standardized to take great part of the market share for the MaaS panorama in most of Indonesian cities. Due to this, informal Motorcycle Taxi Drivers, tend to rise against the private company in to get some of their market share back by means of violence and aggressive tactics. Additionally, previously the government has also tended to be on the side of informal workers, thing that makes the panorama shadier for Go-Jek`s objectives in the domestic market.

Uber in Latin America

Uber, as Go-Jek, offers a transportation service where you can contact independent drivers with their own car to work as a taxi. In Latin America, like in Indonesia this service has had a lot of issues with traditional methods; specifically, taxis. As stated before, the competition between traditional taxi companies and Uber has led to protests, strikes and violence in the past, to the point of having some customers hurt.

Just like in the case with Go-Jek and traditional motorcycle taxis, traditional services saw this new service as something threatening that was disloyal competition. This generates a danger, not only for the drivers that offer either service but also for the clients who try to use this as a method of transportation.

Many countries have tried to use some sort of regulation and solution to stop the violence between traditional taxi drivers and Uber drivers, but most of them to no avail. Colombia has, for example, made offering the service illegal but there is no regulation of who is an Uber driver; Costa Rica has also made the service illegal but it still works normally, same as in Brazil and Argentina.

CONCLUSION AND RECOMMENDATION

As stated before, the biggest challenge for Go-Jek, as it has been for Uber worldwide, and more specifically in Latin American countries, is to be able to find a way to coexist with traditional taxi drivers. If Go-Jek does not reach an agreement with both the government and traditional taxi drivers to be able to offer a legal and safe service, new technologies will always be developed and without a regulated service, both drivers and customers will be affected.

One of the few cities that has a regulation for Uber, different to making it illegal, is Mexico D.F.. A set of rules has been developed and approved by the government, uber drivers and traditional taxi drivers. This regulation aims to end the violence against Uber drivers and those who use the service (Uber en el Mundo, 2018)

First of all, the government stated new policies to make traditional taxi services better to make them more appealing for customers and that way reducing the number of people who use app-based services like Uber or Cabify. Furthermore, they created a new category called *Transportation Services,* solicited through a technological platform; this allowed the state to set some requirements that not only apply to Uber but to similar new and existing services.

The regulation states two main things: first that for every Uber ride the company has to pay 1.5% of the payment to a fund for taxi drivers to better the service of traditional taxis. Second, it also states the type of vehicles that can be used for Uber, setting a minimum price and safety precautions. Even though it isn't a perfect set of rules on their own, it has allowed the existence of an agreement between both, Uber and the traditional Taxi companies that operate in Mexico D.F., and it seeks the improvement of traditional services and the implementation of new technologies (Mexico regula an Uber, 2015).

Taking into consideration Go-Jek's situation and all previous statements; facing irregularities in the form of hostile aggressions by Taxi drivers as well as the similar case of Uber in most of the world, it would be wise to aim for a proper negotiation between the parties involved under the veil of the government in order to solve most of the issues regarding clandestine attacks to Go-Jek drivers. Some of the main recommendations by this case study is to, as it was made in Mexico D.F, contribute a percentage of the earnings to a fund that looks up to improve the service of regular Motorcycle Taxi drivers.

This, would certainly not only improve the customer experience overall, but could expand Go-Jek`s commercial activity by taking off the limitations that its drivers have when providing a service due to the fear of being attacked by the competition. Even more, in this way it could be possible to offer both Go-Jek services and the traditional Motorcycle Taxi Service that certain publics preferand enjoy. Furthermore, it would also protect the service from future issues that can arise and vells for the freedom of people to choose which service to use.

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